

POOR LEGIBILITY

**PORTIONS OF THIS DOCUMENT
MAY BE UNREADABLE, DUE TO
THE QUALITY OF THE
ORIGINAL**

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

UNITED TECHNOLOGIES MOTOR SYSTEMS
EPA SITE NUMBER MSD004010724
COLUMBUS
LOWNDES COUNTY, MS
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY TODD S. EDWARDS
OF MDEQ
ON 01/15/91

DATE OF THIS REPORT: 01/15/91
DATE OF LAST MODIFICATION: 01/15/91

GROUND WATER ROUTE SCORE : 10.61
SURFACE WATER ROUTE SCORE: 0.00
AIR ROUTE SCORE : 0.00

MIGRATION SCORE : 6.13

AQUIFER: COKEZ

ASSUME: WASTE QUANTITY = 2501×10^3

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	650 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	644 FEET	0	0
PRECIPITATION	52.0 INCHES		
EVAPORATION	42.0 INCHES		
NET PRECIPITATION	10.0 INCHES	2	2
PERMEABILITY	1.0X10-6 CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			6
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:CHROMIUM			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	10000 FEET		
AND	MATRIX VALUE	30	30
TOTAL POPULATION SERVED	35929 PERSONS		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	9455		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			39
GROUND WATER ROUTE SCORE (Sgw) = 10.61			

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	1.0 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	1000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT	0		0
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6

SURFACE WATER ROUTE SCORE (Ssw) = 0.00

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
DRUMS
GALLONS
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile
0 to 0.50 mile
0 to 1.0 mile
0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS
FRESH-WATER WETLANDS
CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL
PARK/FOREST/RESIDENTIAL
AGRICULTURAL LAND
PRIME FARMLAND
HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: UNITED TECHNOLOGIES MOTOR SYSTEMS
AS OF 01/15/91

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GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		6	
CONTAINMENT	X	1	
WASTE CHARACTERISTICS	X	26	
TARGETS	X	39	
		<hr/>	
		= 6084 / 57,330	X 100 = 10.61 = S _{gw}

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10	
CONTAINMENT	X	0	
WASTE CHARACTERISTICS	X	26	
TARGETS	X	6	
		<hr/>	
		= 0 / 64,350	X 100 = 0.00 = S _{sw}

AIR ROUTE SCORE

OBSERVED RELEASE		0 / 35,100	X 100 = 0.00 = S _{air}
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SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S²</u>
GROUND WATER ROUTE SCORE (S _{gw})	10.61	112.57
SURFACE WATER ROUTE SCORE (S _{sw})	0.00	0.00
AIR ROUTE SCORE (S _{air})	0.00	0.00
S ² _{gw} + S ² _{sw} + S ² _{air}		112.57
√ (S ² _{gw} + S ² _{sw} + S ² _{air})		10.61
S _M = √ (S ² _{gw} + S ² _{sw} + S ² _{air}) / 1.73		6.13

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

UNITED TECHNOLOGIES MOTOR SYSTEMS
EPA SITE NUMBER MSD004010724
COLUMBUS
LOWNDES COUNTY, MS
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY TODD S. EDWARDS
OF MDEQ
ON 01/15/91

DATE OF THIS REPORT: 01/15/91
DATE OF LAST MODIFICATION: 01/15/91

GROUND WATER ROUTE SCORE : 8.16
SURFACE WATER ROUTE SCORE: 0.00
AIR ROUTE SCORE : 0.00

MIGRATION SCORE : 4.72

AQUIFER: COKE

ASSUME: WASTE QUANTITY = 3020 GALLONS

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	650 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	644 FEET	0	0
PRECIPITATION	52.0 INCHES		
EVAPORATION	42.0 INCHES		
NET PRECIPITATION	10.0 INCHES	2	2
PERMEABILITY	1.0X10-6 CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			6
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	0		
DRUMS	0		
GALLONS	3020		
TONS	0		
TOTAL	15 CU. YDS	2	2
TOTAL WASTE CHARACTERISTICS SCORE:			20
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	10000 FEET		
AND	MATRIX VALUE	30	30
TOTAL POPULATION SERVED	35929 PERSONS		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	9455		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			39

GROUND WATER ROUTE SCORE (Sgw) = 8.16

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	1.0 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	1000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT		0	0
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY	CUBIC YDS	0	
	DRUMS	0	
	GALLONS	3020	
	TONS	0	
	TOTAL	15 CU. YDS	2
TOTAL WASTE CHARACTERISTICS SCORE:			20
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND	MATRIX VALUE	0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6
SURFACE WATER ROUTE SCORE (Ssw) = 0.00			

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
DRUMS
GALLONS
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile

0 to 0.50 mile

0 to 1.0 mile

0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS

FRESH-WATER WETLANDS

CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL

PARK/FOREST/RESIDENTIAL

AGRICULTURAL LAND

PRIME FARMLAND

HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: UNITED TECHNOLOGIES MOTOR SYSTEMS
AS OF 01/15/91

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GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		6
CONTAINMENT	X	1
WASTE CHARACTERISTICS	X	20
TARGETS	X	39

$$= 4680 / 57,330 \times 100 = 8.16 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10
CONTAINMENT	X	0
WASTE CHARACTERISTICS	X	20
TARGETS	X	6

$$= 0 / 64,350 \times 100 = 0.00 = S_{sw}$$

AIR ROUTE SCORE

$$\text{OBSERVED RELEASE} \quad 0 / 35,100 \times 100 = 0.00 = S_{air}$$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S²</u>
GROUND WATER ROUTE SCORE (S_{gw})	8.16	66.59
SURFACE WATER ROUTE SCORE (S_{sw})	0.00	0.00
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S^2_{gw} + S^2_{sw} + S^2_{air}$		66.59
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}$		8.16
$S_M = \sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})} / 1.73$		4.72

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

UNITED TECHNOLOGIES MOTOR SYSTEMS

EPA SITE NUMBER MSD004010724

COLUMBUS

LOWNDES COUNTY, MS

EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY TODD S. EDWARDS

OF MDEQ

ON 01/15/91

DATE OF THIS REPORT: 01/16/91

DATE OF LAST MODIFICATION: 01/16/91

GROUND WATER ROUTE SCORE : 17.10

SURFACE WATER ROUTE SCORE: 0.00

AIR ROUTE SCORE : 0.00

MIGRATION SCORE : 9.88

AQUIFER: EUTAW-MECHAN

ASSUME! WASTE QUANTITY = 2501 YD³

HRS GROUND WATER ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	25 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	19 FEET	3	6
PRECIPITATION	52.0 INCHES		
EVAPORATION	42.0 INCHES		
NET PRECIPITATION	10.0 INCHES	2	2
PERMEABILITY	1.0X10 ⁻⁴ CM/SEC	2	2
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			13
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	2000 FEET		
AND	MATRIX VALUE	20	20
TOTAL POPULATION SERVED	395 PERSONS		
NUMBER OF HOUSES	104		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			29

GROUND WATER ROUTE SCORE (Sgw) = 17.10

HRS SURFACE WATER ROUTE SCORE

<u>CATEGORY/FACTOR</u>		<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE		NO	0	0
2. ROUTE CHARACTERISTICS				
SITE LOCATED IN SURFACE WATER		NO		
SITE WITHIN CLOSED BASIN		NO		
FACILITY SLOPE		1.0 %		
INTERVENING SLOPE		1.0 %	0	0
24-HOUR RAINFALL		3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER		1000 FEET	2	4
PHYSICAL STATE		3		3
TOTAL ROUTE CHARACTERISTICS SCORE:				10
3. CONTAINMENT			0	0
4. WASTE CHARACTERISTICS				
TOXICITY/PERSISTENCE: CHROMIUM				18
WASTE QUANTITY	CUBIC YDS	2501		
	DRUMS	0		
	GALLONS	0		
	TONS	0		
	TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:				26
5. TARGETS				
SURFACE WATER USE			2	6
DISTANCE TO SENSITIVE ENVIRONMENTS			0	0
COASTAL WETLANDS		NONE		
FRESH-WATER WETLANDS		NONE		
CRITICAL HABITAT		NONE		
DISTANCE TO STATIC WATER		> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE		> 3 MILES		
AND		MATRIX VALUE	0	0
TOTAL POPULATION SERVED		0		
NUMBER OF HOUSES		0		
NUMBER OF PERSONS		0		
NUMBER OF CONNECTIONS		0		
NUMBER OF IRRIGATED ACRES		0		
TOTAL TARGETS SCORE:				0

SURFACE WATER ROUTE SCORE (Ssw) = 0.00

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
DRUMS
GALLONS
TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile
0 to 0.50 mile
0 to 1.0 mile
0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS
FRESH-WATER WETLANDS
CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL
PARK/FOREST/RESIDENTIAL
AGRICULTURAL LAND
PRIME FARMLAND
HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: UNITED TECHNOLOGIES MOTOR SYSTEMS
AS OF 01/16/91

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GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		13
CONTAINMENT	X	1
WASTE CHARACTERISTICS	X	26
TARGETS	X	29

$$= \frac{9802}{57,330} \times 100 = 17.10 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10
CONTAINMENT	X	0
WASTE CHARACTERISTICS	X	26
TARGETS	X	6

$$= \frac{0}{64,350} \times 100 = 0.00 = S_{sw}$$

AIR ROUTE SCORE

$$\text{OBSERVED RELEASE} \quad 0 / 35,100 \times 100 = 0.00 = S_{air}$$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S²</u>
GROUND WATER ROUTE SCORE (S _{gw})	17.10	292.41
SURFACE WATER ROUTE SCORE (S _{sw})	0.00	0.00
AIR ROUTE SCORE (S _{air})	0.00	0.00
S ² _{gw} + S ² _{sw} + S ² _{air}		292.41
√ (S ² _{gw} + S ² _{sw} + S ² _{air})		17.10
S _M = √ (S ² _{gw} + S ² _{sw} + S ² _{air}) / 1.73		9.88

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

UNITED TECHNOLOGIES MOTOR SYSTEMS
EPA SITE NUMBER MSD004010724
COLUMBUS
LOWNDES COUNTY, MS
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY TODD S. EDWARDS
OF MDEQ
ON 01/15/91

DATE OF THIS REPORT: 01/16/91
DATE OF LAST MODIFICATION: 01/16/91

GROUND WATER ROUTE SCORE : 13.15
SURFACE WATER ROUTE SCORE: 0.00
AIR ROUTE SCORE : 0.00

MIGRATION SCORE : 7.60

AQUIFER: EVAN-MECHAN

ASSUME: WASTE QUANTITY = 3020 GALLONS

HRS GROUND WATER ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	25 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	19 FEET	3	6
PRECIPITATION	52.0 INCHES		
EVAPORATION	42.0 INCHES		
NET PRECIPITATION	10.0 INCHES	2	2
PERMEABILITY	1.0X10 ⁻⁴ CM/SEC	2	2
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			13
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE:CHROMIUM			18
WASTE QUANTITY	CUBIC YDS	0	
	DRUMS	0	
	GALLONS	3020	
	TONS	0	
TOTAL	15 CU. YDS	2	2
TOTAL WASTE CHARACTERISTICS SCORE:			20
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL	2000 FEET		
AND	MATRIX VALUE	20	20
TOTAL POPULATION SERVED	395 PERSONS		
NUMBER OF HOUSES	104		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			29

GROUND WATER ROUTE SCORE (Sgw) = 13.15

HRS SURFACE WATER ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	1.0 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	1000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT		0	0
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE; CHROMIUM			18
WASTE QUANTITY			
CUBIC YDS	0		
DRUMS	0		
GALLONS	3020		
TONS	0		
TOTAL	15 CU. YDS	2	2
TOTAL WASTE CHARACTERISTICS SCORE:			20
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND	MATRIX VALUE	0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6
SURFACE WATER ROUTE SCORE (Ssw) = 0.00			

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
 DRUMS
 GALLONS
 TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile

0 to 0.50 mile

0 to 1.0 mile

0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS

FRESH-WATER WETLANDS

CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL

PARK/FOREST/RESIDENTIAL

AGRICULTURAL LAND

PRIME FARMLAND

HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: UNITED TECHNOLOGIES MOTOR SYSTEMS
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PAGE 5

GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		13
CONTAINMENT	X	1
WASTE CHARACTERISTICS	X	20
TARGETS	X	29

$$= 7540 / 57,330 \times 100 = 13.15 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10
CONTAINMENT	X	0
WASTE CHARACTERISTICS	X	20
TARGETS	X	6

$$= 0 / 64,350 \times 100 = 0.00 = S_{sw}$$

AIR ROUTE SCORE

$$\text{OBSERVED RELEASE} \quad 0 / 35,100 \times 100 = 0.00 = S_{air}$$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S²</u>
GROUND WATER ROUTE SCORE (S_{gw})	13.15	172.92
SURFACE WATER ROUTE SCORE (S_{sw})	0.00	0.00
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S^2_{gw} + S^2_{sw} + S^2_{air}$		172.92
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}$		13.15
$S_M = \sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})} / 1.73$		7.60

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

UNITED TECHNOLOGIES MOTOR SYSTEMS
EPA SITE NUMBER MSD004010724
COLUMBUS
LOWNDES COUNTY, MS
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY TODD S. EDWARDS
OF MDEQ
ON 01/15/91

DATE OF THIS REPORT: 01/15/91
DATE OF LAST MODIFICATION: 01/15/91

GROUND WATER ROUTE SCORE : 7.89
SURFACE WATER ROUTE SCORE: 0.00
AIR ROUTE SCORE : 0.00

MIGRATION SCORE : 4.56

AQUIFER: GORDO

ASSUME: WASTE QUANTITY = 2501 yd³

HRS GROUND WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	460 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	454 FEET	0	0
PRECIPITATION	52.0 INCHES		
EVAPORATION	42.0 INCHES		
NET PRECIPITATION	10.0 INCHES	2	2
PERMEABILITY	1.0X10 ⁻⁶ CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			6
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL AND	2000 FEET MATRIX VALUE	20	20
TOTAL POPULATION SERVED	182 PERSONS		
NUMBER OF HOUSES	6		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	42		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			29

GROUND WATER ROUTE SCORE (Sgw) = 7.89

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	1.0 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	1000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT	0		0
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	2501		
DRUMS	0		
GALLONS	0		
TONS	0		
TOTAL	2501 CU. YDS	8	8
TOTAL WASTE CHARACTERISTICS SCORE:			26
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6
SURFACE WATER ROUTE SCORE (Ssw) = 0.00			

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0

2. WASTE CHARACTERISTICS

REACTIVITY:

MATRIX VALUE

INCOMPATIBILITY

TOXICITY

WASTE QUANTITY CUBIC YARDS
 DRUMS
 GALLONS
 TONS

TOTAL

TOTAL WASTE CHARACTERISTICS SCORE:

N/A

3. TARGETS

POPULATION WITHIN 4-MILE RADIUS

0 to 0.25 mile

0 to 0.50 mile

0 to 1.0 mile

0 to 4.0 miles

DISTANCE TO SENSITIVE ENVIRONMENTS

COASTAL WETLANDS

FRESH-WATER WETLANDS

CRITICAL HABITAT

DISTANCE TO LAND USES

COMMERCIAL/INDUSTRIAL

PARK/FOREST/RESIDENTIAL

AGRICULTURAL LAND

PRIME FARMLAND

HISTORIC SITE WITHIN VIEW?

TOTAL TARGETS SCORE:

N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: UNITED TECHNOLOGIES MOTOR SYSTEMS
AS OF 01/15/91

PAGE 5

GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		6	
CONTAINMENT	X	1	
WASTE CHARACTERISTICS	X	26	
TARGETS	X	29	

= 4524 / 57,330 X 100 = 7.89 = S_{gw}

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10	
CONTAINMENT	X	0	
WASTE CHARACTERISTICS	X	26	
TARGETS	X	6	

= 0 / 64,350 X 100 = 0.00 = S_{sw}

AIR ROUTE SCORE

OBSERVED RELEASE 0 / 35,100 X 100 = 0.00 = S_{air}

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S²</u>
GROUND WATER ROUTE SCORE (S _{gw})	7.89	62.25
SURFACE WATER ROUTE SCORE (S _{sw})	0.00	0.00
AIR ROUTE SCORE (S _{air})	0.00	0.00
S ² _{gw} + S ² _{sw} + S ² _{air}		62.25
√ (S ² _{gw} + S ² _{sw} + S ² _{air})		7.89
S _M = √ (S ² _{gw} + S ² _{sw} + S ² _{air}) / 1.73		4.56

HAZARD RANKING SYSTEM SCORING SUMMARY

FOR

UNITED TECHNOLOGIES MOTOR SYSTEMS
EPA SITE NUMBER MSD004010724
COLUMBUS
LOWNDES COUNTY, MS
EPA REGION: 4

SCORE STATUS: IN PREPARATION

SCORED BY TODD S. EDWARDS
OF MDEQ
ON 01/15/91

DATE OF THIS REPORT: 01/15/91
DATE OF LAST MODIFICATION: 01/15/91

GROUND WATER ROUTE SCORE :	6.07
SURFACE WATER ROUTE SCORE:	0.00
AIR ROUTE SCORE :	0.00
<hr/>	
MIGRATION SCORE :	3.51

AQUIFER : GORDO

ASSUME : WASTE QUANTITY = 3020 GALLONS

HRS GROUND WATER ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
DEPTH TO WATER TABLE	460 FEET		
DEPTH TO BOTTOM OF WASTE	6 FEET		
DEPTH TO AQUIFER OF CONCERN	454 FEET	0	0
PRECIPITATION	52.0 INCHES		
EVAPORATION	42.0 INCHES		
NET PRECIPITATION	10.0 INCHES	2	2
PERMEABILITY	1.0X10-6 CM/SEC	1	1
PHYSICAL STATE		3	3
TOTAL ROUTE CHARACTERISTICS SCORE:			6
3. CONTAINMENT		1	1
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	0		
DRUMS	0		
GALLONS	3020		
TONS	0		
TOTAL	15 CU. YDS	2	2
TOTAL WASTE CHARACTERISTICS SCORE:			20
5. TARGETS			
GROUND WATER USE		3	9
DISTANCE TO NEAREST WELL AND	2000 FEET MATRIX VALUE	20	20
TOTAL POPULATION SERVED	182 PERSONS		
NUMBER OF HOUSES	6		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	42		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			29
GROUND WATER ROUTE SCORE (Sgw) = 6.07			

HRS SURFACE WATER ROUTE SCORE

CATEGORY/FACTOR	RAW DATA	ASN. VALUE	SCORE
1. OBSERVED RELEASE	NO	0	0
2. ROUTE CHARACTERISTICS			
SITE LOCATED IN SURFACE WATER	NO		
SITE WITHIN CLOSED BASIN	NO		
FACILITY SLOPE	1.0 %		
INTERVENING SLOPE	1.0 %	0	0
24-HOUR RAINFALL	3.5 INCHES	3	3
DISTANCE TO DOWN-SLOPE WATER	1000 FEET	2	4
PHYSICAL STATE	3		3
TOTAL ROUTE CHARACTERISTICS SCORE:			10
3. CONTAINMENT	0		0
4. WASTE CHARACTERISTICS			
TOXICITY/PERSISTENCE: CHROMIUM			18
WASTE QUANTITY CUBIC YDS	0		
DRUMS	0		
GALLONS	3020		
TONS	0		
TOTAL	15 CU. YDS	2	2
TOTAL WASTE CHARACTERISTICS SCORE:			20
5. TARGETS			
SURFACE WATER USE		2	6
DISTANCE TO SENSITIVE ENVIRONMENTS		0	0
COASTAL WETLANDS	NONE		
FRESH-WATER WETLANDS	NONE		
CRITICAL HABITAT	NONE		
DISTANCE TO STATIC WATER	> 3 MILES		
DISTANCE TO WATER SUPPLY INTAKE	> 3 MILES		
AND MATRIX VALUE		0	0
TOTAL POPULATION SERVED	0		
NUMBER OF HOUSES	0		
NUMBER OF PERSONS	0		
NUMBER OF CONNECTIONS	0		
NUMBER OF IRRIGATED ACRES	0		
TOTAL TARGETS SCORE:			6
SURFACE WATER ROUTE SCORE (Ssw) = 0.00			

HRS AIR ROUTE SCORE

<u>CATEGORY/FACTOR</u>	<u>RAW DATA</u>	<u>ASN. VALUE</u>	<u>SCORE</u>
1. OBSERVED RELEASE	NO	0	0
2. WASTE CHARACTERISTICS			
REACTIVITY:			
INCOMPATIBILITY		MATRIX VALUE	
TOXICITY			
WASTE QUANTITY	CUBIC YARDS		
	DRUMS		
	GALLONS		
	TONS		
	TOTAL		
TOTAL WASTE CHARACTERISTICS SCORE:			N/A
3. TARGETS			
POPULATION WITHIN 4-MILE RADIUS			
0 to 0.25 mile			
0 to 0.50 mile			
0 to 1.0 mile			
0 to 4.0 miles			
DISTANCE TO SENSITIVE ENVIRONMENTS			
COASTAL WETLANDS			
FRESH-WATER WETLANDS			
CRITICAL HABITAT			
DISTANCE TO LAND USES			
COMMERCIAL/INDUSTRIAL			
PARK/FOREST/RESIDENTIAL			
AGRICULTURAL LAND			
PRIME FARMLAND			
HISTORIC SITE WITHIN VIEW?			
TOTAL TARGETS SCORE:			N/A

AIR ROUTE SCORE (Sa) = 0.00

HAZARD RANKING SYSTEM SCORING CALCULATIONS
FOR
SITE: UNITED TECHNOLOGIES MOTOR SYSTEMS
AS OF 01/15/91

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GROUND WATER ROUTE SCORE

ROUTE CHARACTERISTICS		6
CONTAINMENT	X	1
WASTE CHARACTERISTICS	X	20
TARGETS	X	29

$$= 3480 / 57,330 \times 100 = 6.07 = S_{gw}$$

SURFACE WATER ROUTE SCORE

ROUTE CHARACTERISTICS		10
CONTAINMENT	X	0
WASTE CHARACTERISTICS	X	20
TARGETS	X	6

$$= 0 / 64,350 \times 100 = 0.00 = S_{sw}$$

AIR ROUTE SCORE

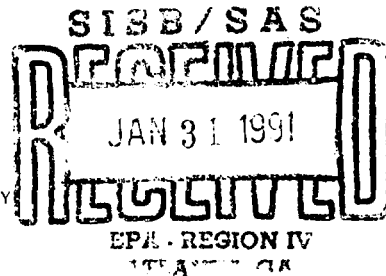
$$\text{OBSERVED RELEASE} \quad 0 / 35,100 \times 100 = 0.00 = S_{air}$$

SUMMARY OF MIGRATION SCORE CALCULATIONS

	<u>S</u>	<u>S²</u>
GROUND WATER ROUTE SCORE (S_{gw})	6.07	36.84
SURFACE WATER ROUTE SCORE (S_{sw})	0.00	0.00
AIR ROUTE SCORE (S_{air})	0.00	0.00
$S^2_{gw} + S^2_{sw} + S^2_{air}$		36.84
$\sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})}$		6.07
$S_M = \sqrt{(S^2_{gw} + S^2_{sw} + S^2_{air})} / 1.73$		3.51



STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
RAY MABUS
GOVERNOR



January 30, 1991

Mr. Brian Farrier
Site Investigation and
Support Branch
Waste Management Division
U.S. EPA - Region IV
345 Courtland Street, N. E.
Atlanta, GA 30365

Re: ~~United~~ Technologies Motor Systems
MSD004010724
Columbus, MS

Dear Brian:

Enclosed is a PAM report for the above referenced facility. A copy of the report, including the supplemental documentation, has been forwarded to Beverly (Foster) Williams, Waste Management Division, EPA.

Please contact me if you have any questions.

Sincerely,

Jim Hardage

Jim Hardage
CERCLA Section

JH:TE_mes5

Enclosure

cc: Beverly Williams (w/enclosures)

*Deferred to RCRA
for RFA sampling.
BJF 2/1/91
1/30/91*

AKA: AMERICAN BOSCH

MODIFIED PRELIMINARY ASSESSMENT (PAM) REPORT
UNITED TECHNOLOGIES MOTOR SYSTEMS
MSD004010724
COLUMBUS, MISSISSIPPI

PREPARED BY:

Todd S. Edwards
CERCLA Section
Hazardous Waste Division
Mississippi Office of Pollution Control (MSOPC)
P. O. Box 10385
Jackson, Mississippi 39289

DRAFT REPORT COMPLETED
December 29, 1990

REVIEWED AND EDITED BY:

Jim Hardage
CERCLA Unit
OPC

84

FINAL REVISIONS:
January 29, 1991

1. Introduction
2. Background
3. Facility Description
4. Waste Description/Containment
5. Waste Quantity/Toxicity
6. Visual Site Inspection/Solid Waste Management Unit Identification
7. Geology/Hydrology
8. Aquifer of Concern
9. Climate and Precipitation
10. Surface Water
11. Sensitive Environments
12. Recommendation
13. Appendix
 - (a) HRS II Checklist
 - (b) References

Introduction

This report is a modified preliminary assessment (PAM) of the United Technologies Motor Systems facility located in Columbus, Lowndes County, Mississippi.

County Code:	087
Congressional District:	02
Coordinates:	Latitude 33° 29' 21" Longitude 88° 22' 48"
Location:	SW¼ NW¼ S24 T19N R18W
Directions to Site:	Travel State Highway 82 to Columbus. At the intersection of Highway 82 and McCrary Road, travel McCrary Road towards the south. Drive about 0.4 mile; the facility is at 2228 McCrary Road.
Contact Official:	Mr. David Livingston Vice-President of Operations United Technologies Motor Systems P. O. Box 2228 Columbus, MS 39704-2228 Phone: (601) 328-4150

Background

American Bosch Electrical Products commenced operation of its Columbus facility in 1954. The company changed names to United Technologies Electro Systems in 1978 and subsequently became known as United Technologies Motor Systems (UTMS) in late 1989. UTMS manufactures small electrical motors, ignition products, lawn care equipment, and diesel fuel injection nozzles and holders. Typical manufacturing activities include machine and casting of steel, winding of armatures, cleaning and plating metal parts, and final assembly of products (Reference 1).

UTMS submitted RCRA forms to the Mississippi Department of Natural Resources (MDNR) in October, 1980. The facility was subsequently granted interim status for storage of hazardous waste (Reference 2).

In April, 1983, UTMS applied to the MDNR for withdrawal of interim status at their facility due to a corporate assessment that a RCRA Part B permit for storage was unnecessary. Upon further review of their draft closure plan, UTMS decided in May, 1983, to retain interim status (References 3 and 4).

UTMS has an approved closure plan per the RCRA requirements. According to the RCRA, closure must occur by November 8, 1992. Once closure has occurred, UTMS will continue to operate as a fully regulated generator (References 1 and 5).

In 1972, UTMS submitted a construction permit application to the MDNR to build air emissions equipment for control of air emissions resulting from spray painting and vapor degreasing operations. Performance evaluation and operating permits were subsequently issued. UTMS's current permit (number 1680-00002) allows them to emit air contaminants from spray and dip painting systems, paint drying ovens, and two vapor degreasers at rates not exceeding the Mississippi Air Quality Regulations. UTMS currently employs a water curtain and a baghouse to control air emissions from their facility (Reference 6).

The MDNR issued UTMS Pretreatment Permit PT90048 on August 1, 1984 allowing discharge of electroplating wastewater from UTMS into the Columbus POTW. The MDNR reissued the permit on August 8, 1989. United Technologies is currently in compliance with PT90048. Prior to 1985, UTMS did not have a wastewater treatment system (Reference 7).

Facility Description

UTMS is located on a 43.5 acre tract within the city limits of Columbus, Lowndes County, Mississippi, in the northeastern part of the state (References 1 and 8). The facility grounds average approximately 180 feet above sea level. The nearest residence is located about 3,000 feet northwest of the facility (Reference 8).

Waste Description/Containment

Wastewater from facility parts washing and electroplating processes is treated via physical/chemical treatment, including:

- * cyanide destruction
- * chromium reduction
- * metal precipitation
- * sludge dewatering

Treated wastewater is discharged into the Columbus POTW under the authority of Pretreatment Permit PT90048 (References 1 and 7). Sludges generated as a consequence of wastewater treatment, which are RCRA F006 wastes, are collected in a 25 cubic yard roll-off container. When the container is filled, it is closed and shipped for disposal at Heritage Environmental Services facility in Indianapolis, Indiana.

Other waste generated via the electroplating processes include spent cyanide plating bath solutions (F007), plating sludges from plating baths (F008), spent stripping and cleaning bath solutions (F009), and quenching bath residues (F010). These wastes are periodically removed from plating vats, containerized, stored, and shipped for disposal (Reference 1).

Spent solvents generated from parts cleaning are collected in 5 gallon containers which are subsequently poured into 55 gallon drums at various collection points. The spent solvents include varsol (an ignitable solvent), methyl ethyl ketone, and 1,1,1 trichloroethane (Reference 1). Waste paint and paint sludges are also collected at various generation points. The storage drums, when filled, are taken to the interim status storage facility on site (Reference 1).

UTMS has included several acutely and chronically hazardous wastes on their most recent Notification of Hazardous Waste Activity (NOHWA). These wastes include the following: copper cyanide (P029), cyanides, n.o.s. (P030), sodium cyanide (P106), zinc cyanide (P121), acetone (U002), calcium chromate (U032), methanol (U154), toluene (U220), and xylene (U239). There is no record of any of these wastes being generated at UTMS in the past, nor does the facility anticipate generation of these wastes in the future. These "wastes" are simply raw products currently stored at the facility. UTMS included these raw products on their NOHWA as a precautionary measure should these products become processed into hazardous wastes and subsequently require disposal (Reference 1).

UTMS's interim status storage facility is covered (i.e., under roof), sloped, and diked. Any spill within the facility is sorbed, contained, and shipped as hazardous waste. The containment structure is composed of concrete of good integrity with no visible sign of cracks (Reference 1 and Visual Site Inspection).

According to a file review and interviews with facility personnel, no release of hazardous waste from UTMS's interim status storage facility has ever been documented (Reference: Visual Site Inspection).

Waste Quantity/Toxicity

As estimated 3020 gallons of untreated chromate bath wastewater was spilled onto facility grounds (south of UTMS's pretreatment plant) on July 31, 1990. Facility personnel estimated that approximately 7500 square feet of soil adjacent to the tank farm from which the spill originated was affected. UTMS took eight TCLP samples of the area after the incident. These analyses indicated that the soil was below TCLP regulatory standards for analytes considered, namely: total chromium, silver, arsenic, barium, cadmium, hexavalent chromium, mercury, lead, and selenium (Reference 19). Chromium is highly toxic and highly persistent (Reference 15).

Also, in the middle 1970's, UTMS experienced an underground sewer line failure of its main effluent pipeline to the Columbus POTW. An undetermined amount of process wastewater (from facility electroplating operations) and sanitary wastewater was discharged before the underground line was subsequently replaced (Reference: Visual Site Inspection).

Visual Site Inspection/SWMU Identification

The Mississippi Office of Pollution Control (OPC) conducted a visual site inspection (VSI) at United Technologies Motor Systems on January 9, 1991. Those present were:

<u>Name</u>	<u>Organization</u>	<u>Location</u>
Mr. Louis Crawford	OPC	Jackson, MS
Mr. Todd Edwards	OPC	Jackson, MS
Mr. John Hardy	UTMS	Columbus, MS
Ms. Kathy Nelson	UTMS	Columbus, MS
Ms. Julie Walawender	UTA	Dearborn, MI

After discussion of past and present waste management practices, the VSI was conducted to identify solid waste management units (SWMUs) at the facility. These units are discussed and summarized in Tables 1 and 2 (References 22 and 23):

TABLE 1

Solid Waste Management Units (SWMUs)
Identified at United Technologies Motor Systems Based on VSI

SWMU #	RCRA Regulated	Status	Recommendation
1. Chromate Bath Holding Tank Spill Area	No	Inactive	NFRAP
2. Muriatic Acid Spill Area	No	Inactive	NFRAP
3. Wastewater Treatment System	No	Active	NFRAP
4. Manhole Receiving Pretreat- ment Outfall Effluent	No	Active	RFA II
5. Waste Oil Tanks Adjacent to D-10 Building	No	Active	NFRAP
6. Hazardous Waste Sattellite Accumulation Areas	Yes	Active	NFRAP
7. Hazardous Waste Storage Area	Yes	Active	NFRAP
8. Spray Paint Booths	No	Active	NFRAP
9. Epoxy Dust Collectors	No	Active	NFRAP
10. Stormwater Drainage System	No	Active	RFA II
11. Process Wastewater Conduit System	No	Active	RFA II
12. Wastewater Holding Tank Farm	No	Active	RFA II
13. Gel - Coat Spill Areas	No	Inactive	RFA II

Recommendation Key:

- (1) NFRAP - No Further Remedial Action Planned
- (2) RFA II - RCRA Facility Assessment Phase II Sampling

TE_mes1

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

TABLE 2

SWMU DATA SHEET

Page 1 of 13

SWMU NUMBER: 1

PHOTO NUMBER: 1, 2, 3 & 5

NAME: Chromate Bath Waste Holding Tank Spill Area

PHYSICAL DESCRIPTION AND CONDITION: The area over which the spill occurred did not show signs of stressed vegetation or discolored soil. According to facility personnel the liquid waste was spilled over an estimated 7500 ft² area of soil adjacent to the wastewater treatment system tank farm.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Trivalent and hexavalent chromium, along with various dilute acids, were in the spilled waste solution.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater (X) Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): A spill of approximately 3020 gallons occurred in August, 1990. Eight soil samples from the area were collected and analyzed. Results indicated no metal concentrations above the TCLP regulatory standards.

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: Visual Site Inspection (VSI)

COMMENTS: The spill occurred due to an unclosed valve near the top of the referenced tank (Photo #3).

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

TABLE 2

SWMU DATA SHEET

Page 2 of 13

SWMU NUMBER: 2

PHOTO NUMBER: 4

NAME: Muriatic Acid Spill Area

PHYSICAL DESCRIPTION AND CONDITION: The area over which the spill occurred did not show signs of stressed vegetation or discolored soil. Facility personnel did not quantify the affected area of the soil, but they did indicate that the spilled amount was less than one gallon.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Product-grade muriatic acid.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): According to facility personnel, product-grade muriatic acid was spilled from a tank farm onto its surrounding dike and proximate ground (soil) in December, 1990. Since the spilled quantity was small, facility personnel simply applied water to the dike and affected ground to neutralize the acid.

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

TABLE 2

SWMU DATA SHEET

Page 3 of 13

SWMU NUMBER: 3

PHOTO NUMBER: 6 and 7

NAME: Wastewater Treatment System

TYPE OF UNIT: Physical/chemical process wastewater treatment system

PERIOD OF OPERATION: 1985 - present

PHYSICAL DESCRIPTION AND CONDITION: Unit processes employed are cyanide destruction, hexavalent chromium reduction, metal precipitation, final clarification, and sludge dewatering. The area is contained within dikes of good integrity. No sign of cracks in the concrete floor of the area were evident.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Wastewater and sludge generated from facility zinc, cadmium, copper, and chromium conversion plating operations. Cyanide is utilized in the plating process.

RELEASE PATHWAYS: Air () Surface Water (X) Soil ()
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): None

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI and OPC files

COMMENTS: Prior to 1985, all process wastewater from the plating facility was discharged untreated into the Columbus POTW.

Project Name: United Technologies Motor Systems

Date: January 9, 1991

MSD004010724

City, State: Columbus, Mississippi

TABLE 2

SWMU DATA SHEET

Page 4 of 13

SWMU NUMBER: 4

PHOTO NUMBER: 8

NAME: Manhole Receiving Pretreatment Outfall Effluent

PERIOD OF OPERATION: 1985 - present

PHYSICAL DESCRIPTION AND CONDITION: The manhole and surrounding area appeared to be in good condition with no apparent shift in local grade or evidence of stressed vegetation.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Treated process wastewater from facility zinc, cadmium, copper, and chromium conversion plating operations.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater (X) Subsurface Gas ()

HISTORY AND/OR EVIDENCES OF RELEASE(s): None

RECOMMENDATIONS: No Further Action ()
RFA Phase II Sampling (X)
RFI Necessary ()

REFERENCES: VSI

COMMENTS: (1) Wastewater from this SWMU flows into the process wastewater conduit system described as SWMU #11.
(2) Subsurface soil samples should be taken in the area surrounding the manhole to determine if the underground sewer line is releasing to the environment.

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

TABLE 2

SWMU DATA SHEET

Page 5 of 13

SWMU NUMBER: 5

PHOTO NUMBER: 9

NAME: Waste Oil Tanks Adjacent to D-10 Building

TYPE OF UNIT: Storage area

PERIOD OF OPERATION: 1987 - present

PHYSICAL DESCRIPTION AND CONDITION: The tanks were in good physical condition; the dike surrounding the tanks appeared to be of good integrity. The likely migration pathway of a spill would be into the facility stormwater system.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): None

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI and OPC files

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

TABLE 2

SWMU DATA SHEET

Page 6 of 13

SWMU NUMBER: 6

PHOTO NUMBER: 10, 19, and 20

NAME: Hazardous Waste Satellite Accumulation Areas

TYPE OF UNIT: Temporary storage areas for hazardous waste before eventual transfer to the UTMS's interim status storage facility.

PERIOD OF OPERATION: 1981 - present (1987 - present for RCRA ignitable wastes)

PHYSICAL DESCRIPTION AND CONDITION: RCRA ignitable wastes are stored in drums and subsequently enclosed in metal cabinets in the satellites accumulation areas. Non-flammable listed wastes are drummed but not stored in cabinets. Housekeeping in the areas inspected was excellent.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Various flammable mixed solvents (including acetone, methyl ethyl ketone, and varsol), waste 1,1,1 trichloroethane, plating and washer sludge, paint waste, and grinder sludge.

RELEASE PATHWAYS: Air () Surface Water (X) Soil ()
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): None

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI and OPC files

COMMENTS: There are fifteen satellite accumulation areas at UTMS, all of which are indoors..

Project Name: United Technologies Motor Systems

Date: January 9, 1991

MSD004010724

City, State: Columbus, Mississippi

TABLE 2

SWMU DATA SHEET

Page 7 of 13

SWMU NUMBER: 7

PHOTO NUMBER: 11, 12, 13, 14, 15,
16, and 17

NAME: Hazardous Waste Storage Area

TYPE OF UNIT: Interim status storage area for facility hazardous waste.

PERIOD OF OPERATION: 1986 - present

PHYSICAL DESCRIPTION AND CONDITION: The storage area has a concrete floor, is fenced, locked, and has a twelve inch dike surrounding it. The floor and dike are of good integrity; no sign of cracks were noted.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Waste 1,1,1 trichloroethane, waste mixed solvents, plating and parts washer sludge, paint waste from spray painting operations, and grinder sludge are stored in this area prior to approved disposal by Heritage Environmental Services of Indianapolis, Indiana. All of the above wastes are RCRA hazardous except for the grinder sludge.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE (s): None

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI and OPC files

COMMENTS: Prior to December, 1989, Chemical Waste Management in Emelle, Alabama received UTMS's hazardous waste.

Project Name: United Technologies Motor Systems
MSD004010724

Date: January 9, 1991

City, State: Columbus, Mississippi

TABLE 2

SWMU DATA SHEET

Page 8 of 13

SWMU NUMBER: 8

PHOTO NUMBER: 18

NAME: Spray Paint Booths

PERIOD OF OPERATION: 1970 - present

PHYSICAL DESCRIPTION AND CONDITION: The booth is approximately an 8'x8'x8' enclosed area. A "water curtain" is recycled along the back of the booth to reduce air emissions from the operation. The metal booth appears to be of good integrity; housekeeping is good.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Paint waste skimmed from the water curtain is collected in five-gallon containers before transfer to one of the hazardous waste satellite accumulation areas.

RELEASE PATHWAYS: Air (X) Surface Water () Soil ()
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): None

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI and OPC files

COMMENTS: A second spray paint booth is located adjacent to the one documented in Photo #18.

TABLE 2

SWMU DATA SHEET

Page 9 of 13

SWMU NUMBER: 9

PHOTO NUMBER: 21

NAME: Epoxy Dust Collectors

TYPE OF UNIT: Particulate removal units

PERIOD OF OPERATION: 1982 - present

PHSICAL DESCRIPTION AND CONDITION: Epoxy particulate is generated from a process which bakes epoxy onto armatures. The dust collectors remove this particulate from the air. Housekeeping in the area was excellent.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Epoxy particulate.

RELEASE PATHWAYS: Air (X) Surface Water () Soil ()
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): None

RECOMMENDATIONS: No Further Action (X)
RFA Phase II Sampling ()
RFI Necessary ()

REFERENCES: VSI

COMMENTS: (1) There are four epoxy dust collectors at UTMS.
(2) All epoxy particulate that is captured is recycled.

TABLE 2

SWMU DATA SHEET

Page 10 of 13

SWMU NUMBER: 10

PHOTO NUMBER: 22, 23, 24, 25, 26 &
27, & 30

NAME: Stormwater Drainage System

PERIOD OF OPERATION: 1974 - present

PHYSICAL DESCRIPTION AND CONDITION: The system consists of sundry area drains, roof drains, and open channel conduits ultimately resulting in three facility stormwater outfalls (i.e., the "East", "West #1", and "West #2" outfalls) into an unnamed tributary of McCrary Creek. All areas of the system inspected were in good condition.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: All facility stormwater exits from the three outfalls. Communication of raw chemical products or waste with stormwater is not probable, but possible due to the proximity of various storage areas.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): None

RECOMMENDATIONS: No Further Action ()
RFA Phase II Sampling* (X)
RFI Necessary ()

REFERENCES: VSI

COMMENTS:

- (1) The "East" outfall handles stormwater from the floor drains and roof drains of the "55", "69", and "74" buildings.
- (2) The "West #1" outfall handles stormwater from along the west loading area and from along the south side of the facility.
- (3) The "West #2" outfall conveys stormwater from the facility parking lot and from roof drains from the "54" building.
- (4)* Subsurface soil and sediment samples should be taken in the respective drainage ditches receiving the east and west stormwater outfalls.

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

TABLE 2
SWMU DATA SHEET

Page 11 of 13

SWMU NUMBER: 11

PHOTO NUMBER: 28

NAME: Process Wastewater Conduit System

PERIOD OF OPERATION: 1954-present. Prior to construction of the facility wastewater treatment system (i.e., 1985), all wastewater exited along a different (now unused) line. Both lines encompass this SWMU description.

PHYSICAL DESCRIPTION AND CONDITION: Although obviously unable to visually observe, facility personnel indicated that a break in the main sewer line leading to the facility's main sewage collection point (i.e., manhole) occurred in the middle 1970's. An undetermined amount of sewage (process and sanitary) was released. The broken line was subsequently replaced.

WASTE AND/OR HAZARDOUS CONSTITUENTS MANAGED: Process wastewater from facility zinc, cadmium, copper, and chromium conversion plating operations, along with facility sanitary wastewater.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater (X) Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(s): As previously mentioned, an undetermined volume of untreated wastewater was released via a broken sewer line in the middle 1970's.

RECOMMENDATIONS: No Further Action ()
RFA Phase II Sampling (X)
RFI Necessary ()

REFERENCES: VSI

COMMENTS:

- (1) Prior to 1985, all process wastewater from the plating facility was discharged untreated into the Columbus POTW.
- (2) The area over the main sewer discharge is currently a facility parking lot.
- (3) Subsurface soil and groundwater samples should be taken along the area surrounding the referenced broken sewer line.
- (4) Subsurface soil and groundwater samples should be taken along the area surrounding the manhole receiving total facility sewage immediately prior to discharge into the Columbus POTW.

Project Name: United Technologies Motor Systems

Date: January 9, 1991

MSD004010724

City, State: Columbus, Mississippi

TABLE 2
SWMU DATA SHEET

Page 12 of 13

SWMU NUMBER: 12

PHOTO NUMBER: 5 of 29

NAME: Wastewater Holding Tank Farm

TYPE OF UNIT: Holding area for facility wastewater

PERIOD OF OPERATION: 1985 - Present

PHYSICAL DESCRIPTION AND CONDITION: The tank farm contains holding tanks for facility chromate bath and cyanide containing wastewater. A third tank containing waste oil is also present. The concrete around the cyanide wastewater holding tank showed evidence of deterioration.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: Trivalent and hexavalent chromium, cyanide, various dilute acids, and waste oil.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater () Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(S): As mentioned, the concrete around the cyanide wastewater holding tank showed evidence of deterioration, possibly due to contact with cyanide containing wastewater.

RECOMMENDATIONS: No Further Action ()
RFA Phase II Sampling (X)
RFI Necessary ()

REFERENCES: VSI and OPC files

COMMENTS:

- (1) The soil around the perimeter of the concrete foundation of the tank farm should be sampled for metals and cyanide.
- (2) Concrete of questionable integrity should be replaced/repaired and any cracks should be repaired.

Project Name: United Technologies Motor Systems
MSD004010724
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TABLE 2
SWMU DATA SHEET

Page 13 of 13

SWMU NUMBER: 13

PHOTO NUMBER: 31

NAME: Gel-Coat Spill Areas

PHYSICAL DESCRIPTION AND CONDITION: Several areas around the south perimeter of the facility (and adjacent to the stormwater system on that perimeter) had this substance deposited on the ground. The areas average approximately 2 feet² in area. According to facility personnel, the substance consists of organic peroxides and styrene resins, which form a solid matrix upon mixing. The Gel-Coat is used on motor armatures.

WASTES AND/OR HAZARDOUS CONSTITUENTS MANAGED: According to its MSDS, Gel-Coat contains: styrene (35%), titanium dioxide (10%), and silicon dioxide (1%). According to facility personnel, the other constituents are not hazardous materials and therefore are not listed on the MSDS.

RELEASE PATHWAYS: Air () Surface Water (X) Soil (X)
Groundwater (X) Subsurface Gas ()

HISTORY AND/OR EVIDENCE OF RELEASE(S): Several areas on the south perimeter of the facility had Gel-Coat deposits

RECOMMENDATIONS: No Further Action ()
RFA Phase II Sampling (X)
RFI Necessary ()

REFERENCES: VSI and OPC files

COMMENTS: (1) All spilled Gel-Coat material from these areas should be removed from facility grounds and disposed of as solid waste.

(2) Surficial soil samples should be taken at each spill area to confirm that there has been no release to the environment.

Project Name: United Technologies Motor Systems
MSD004010724
City, State: Columbus, Mississippi

Date: January 9, 1991

Geology/Hydrology

The geologic units below the facility in descending order from the youngest (surficial) unit to the oldest, fresh water-bearing unit are;

Surficial Terrace and Alluvial Deposits, Eutaw Formation, McShan Formation, Tuscaloosa Group (consisting of the Gordo Formation and the Coker Formation), and the Lower Cretaceous Series (undifferentiated).

The Surficial Terrace and Alluvial Deposits comprise the surficial facility geology. Underlying the facility, the Eutaw Formation consists of the Tombigbee Sand Member and a lower unnamed member. This formation is predominantly composed of glauconitic fine-to-medium grained micaceous sand deposited in shallow marine waters.

The Tombigbee Sand Member is a massive, fine-grained, glauconitic, calcareous sand. However, many shale and clay beds of varying thickness are interbedded within this member, lithologically separating it from the unnamed member below. The lower unnamed member of the Eutaw Formation is composed mainly of thin beds of glauconitic sand and gray clay (References 9 and 10; Pg. 56, Pg. 59). The sand in the unnamed member is less glauconitic and more permeable than sand in the overlying Tombigbee Sand Member (Reference 11; Pg. 84).

The underlying McShan Formation commonly consists of many layers of sand and gray clay. The sand in this formation is generally fine-to-medium sized glauconite (Reference 10; Pg. 59).

The Eutaw Formation and the McShan Formation are not hydrologically separated and are thus considered to be a single aquifer system (Reference 11; Pg. 84). The thickness of these combined formations below the facility is approximately 300 feet (Reference 12). The Eutaw-McShan aquifer system is confined below by thick beds of clay in the upper Gordo Formation (Reference 11; Pg. 84). The thickness of the clay bed is approximately 70 feet (Reference 12).

The lower Gordo Formation of the Tuscaloosa Group consists of a massive sand and gravel unit (References 10 and 11; Pg. 65, Pg. 90). This sand and gravel subunit is approximately 120 feet in thickness (Reference 12) and is confined below by the clay of the upper Coker Formation (Reference 11; Pg. 90) which is approximately 25 feet thick (Reference 12). The lower Gordo Formation is considered a separate and distinct hydrological unit.

The lower Coker Formation is composed mainly of massive sand, clay, and gravel. The lower part of this formation may be indistinguishable in places from the sand in the underlying Lower Cretaceous Series (References 10 and 11; Pg. 65, 96). The water-bearing portion of this formation is approximately 450 feet thick below the facility (Reference 12).

As inferred above, the Lower Cretaceous Series is in good hydrological contact with the overlying Coker Formation and the underlying Paleozoic Rock. In Mississippi, the base of freshwater is above the base of the Paleozoic Rock (Reference 11; Pgs. 96 and 102).

Aquifer of Concern

The Eutaw-McShan aquifer system is the aquifer of concern (AOC).

The AOC provides drinking water for approximately 395 people within a three-mile radius of the facility. This population figure is based on the following:

- 1) There are 104 home wells in the AOC within a three-mile radius of the facility (References 13 and 14).
- 2) Each home well serves an estimated 3.8 people (Reference 15).

The unsaturated zone of the surficial aquifer is composed of glauconitic sands and alluvium and extends to an estimated depth of 25 feet below the land surface. The depth of deposited waste or contaminated soil (if any) is not known, so a depth of six feet is assumed (Reference 15).

The least permeable continuous layer between possible contamination and the AOC is the Eutaw Formation. The Eutaw Formation has a relative permeability of approximately 10^{-4} cm/s (Reference 15; Pg. GW-25). The principal uses of water from the AOC are for home drinking water (Reference 14).

The nearest utilized well to the facility relative to the AOC is a home well identified as U.S.G.S. G110. The well is 140 feet deep and is screened at a depth of 31 feet. It is approximately 2000 feet north of the facility (References 13 and 14).

There are two municipal public water wells within a three-mile radius of the facility serving an estimated population of 35,929 people; another public well, owned by Pine Haven Water Association, serves approximately an additional 182 people. These wells, however, are screened in underlying, confined hydrologic formations (References 13 and 14).

Climate and Precipitation

Lowndes County has a semitropical climate influenced primarily by the Gulf of Mexico. The summers in the area are hot and humid; winters are cool and fairly short. Peak precipitation generally occurs during the late winter and early spring. Precipitation averages approximately 52 inches annually (References 15 and 16; Pg. GW-21, Pg. 6).

The mean annual lake evaporation in the area is 42 inches (Reference 15: GW-20). The resulting net precipitation for the area is 10 inches annually.

The one-year, 24-hour rainfall is approximately 3.5 inches (Reference 15; Pg. SW-15).

Surface Water

The nearest perennial down-slope surface water relative to the facility is McCrary Creek, which is approximately 1,000 feet from the facility along the surface water migration pathway. Runoff from the facility flows southerly into McCrary Creek (Reference 8).

The slope of the facility terrain is less than one percent; the slope of the intervening terrain along the surface water migration pathway is approximately one percent (Reference 8).

According to the Mississippi Office of Land and Water Resources, there are no surface water intakes along the three-mile surface water migration pathway. However, two intakes, SW-1040 and SW-1275, are located along the extended fifteen mile migration pathway. SW-1040, owned by the Weyerhaeuser Company, is approximately 3.5 stream miles from the facility; SW-1275, owned by Mr. William E. Cox, is approximately 5 stream miles from the facility (References 20 and 21).

It is assumed that surface water along the three-mile migration pathway is used for recreational purposes (Reference 15; Pg. SW-33).

Sensitive Environments

There are no habitats of federally endangered plant or animal species, national wildlife refuges, or fresh-water wetlands within one-mile of the facility along the surface water migration pathway. However, there are some wetland areas along the extended fifteen-mile migration pathway (References 17 and 18).

Recommendation

The Mississippi Office of Pollution Control recommends that RFA Phase II sampling, as specified in Tables 1 and 2, be conducted at this facility.

RECONNAISSANCE CHECKLIST FOR HRS2 CONCERNS

Instructions: Obtain as much "up front" information as possible prior to conducting fieldwork. Complete the form in as much detail as you can, providing attachments as necessary. Cite the source for all information obtained.

Site Name: United Technologies Motor System

City, County, State: Columbus, Lowndes County, Mississippi

EPA ID No.: MSD004010724

Person Responsible for form: Todd Edwards

Date: 18 January 1991

Air Pathway

Describe any potential air emission source onsite: UTMS has an operating permit from the OPC for air emissions from spray painting and vapor degreasing operations. UTMS employs a water curtain and a baghouse to control air emissions from their facility.

Identify any sensitive environments within 4 miles: N/A

Identify the maximally exposed individual (nearest residence or regularly occupied building workers do count): N/A

Groundwater Pathway

Identify any areas of karst terrain: N/A

Identify additional population due to consideration of wells completed in overlying aquifers to the AOC: N/A since the surficial aquifer system is the AOC.

Do significant targets exist between 3 and 4 miles from the site?
Yes. There are 80 additional wells completed in the 3-4 mile radius.
Of these, 65 are home wells and 4 are public wells.

TE_mes3

Is the AOC a sole source aquifer according to Safe Drinking Water Act: (i.e. is the site located in Dade, Broward, Volusia, Putnam, or Flager County, Florida)

No.

Surface Water Pathway

Are there intakes located on the extended 15-mile migration pathway: Yes. Two surface water intakes (SW-1040 & SW-1275) are located on the surface water migration pathway along the Tombigbee River. SW-1275 is used for crop irrigation; SW-1040 is utilized for industrial purposes.

Are there recreational areas, sensitive environments, or human food chain targets (fisheries) along the extended pathway? Yes. Several wetland areas occur along the extended pathway.

Onsite Exposure Pathway

Is there waste or contaminated soil onsite at 2 feet below land surface or higher? Unknown.

Is the site accessible to non-employees (workers do not count)? No. The facility is fenced and secured.

Are there residences, schools, or daycare centers onsite or in close proximity? Yes, there is a school approximately 2,000 feet northwest of the facility.

Are there barriers to travel (e.g., a river) within one mile? Yes. McCrary Creek is approximately 1,000 feet south of the facility.

TE_mes3

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REGION: 04
STATE : MS

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

PAGE: 39
RUN DATE: 05/05/87
RUN TIME: 12:52:58

M.2 - SITE MAINTENANCE FORM

* ACTION: _

EPA ID : MSD004010724

SITE NAME: AMERICAN BOSCH ELECTRICAL PRODUCTS

SOURCE: H

STREET : MCCRARY RD

CONG DIST: 03

CITY : COLUMBUS

ZIP: 39701

CNTY NAME: LOWNDES

CNTY CODE : 087

LATITUDE : 33/29/21.0

LONGITUDE : 088/22/48.0

LL-SOURCE: R

LL-ACCURACY:

SMSA :

HYDRO UNIT: 03160101

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N

NPL IND: N NPL LISTING DATE:

NPL DELISTING DATE:

SITE/SPILL IDS:

RPM NAME: FELECIA BARNETT

RPM PHONE: 404-347-2284

SITE CLASSIFICATION:

SITE APPROACH:

DIOXIN TIER:

REG FLD1:

REG FLD2: 1

RESP TERM: PENDING ()

NO FURTHER ACTION ()

ENF DISP: NO VIABLE RESP PARTY ()
ENFORCED RESPONSE ()

VOLUNTARY RESPONSE ()
COST RECOVERY ()

SITE DESCRIPTION:

* _____
* _____
* _____
* _____

REGION: 04
STATE : MS

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

PAGE: 40
RUN DATE: 05/05/87
RUN TIME: 12:52:58

M.2 - PROGRAM MAINTENANCE FORM

* ACTION: _

SITE: AMERICAN BOSCH ELECTRICAL PRODUCTS

EPA ID: MSD004010724 PROGRAM CODE: H01 PROGRAM TYPE:

PROGRAM QUALIFIER: ALIAS LINK :

PROGRAM NAME: SITE EVALUATION

DESCRIPTION:

* _____ *

* _____ *

* _____ *

* _____ *

* _____ *

REGION: 04
STATE : MS

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

PAGE: 41
RUN DATE: 05/05/87
RUN TIME: 12:52:58

M.2 - EVENT MAINTENANCE FORM

* ACTION: _

SITE: AMERICAN BOSCH ELECTRICAL PRODUCTS
PROGRAM: SITE EVALUATION

EPA ID: MSD004010724 PROGRAM CODE: H01 EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E

EVENT NAME: DISCOVERY STATUS:

DESCRIPTION:

* _ _ _ _ _ *

* _ _ _ _ _ *

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ORIGINAL	CURRENT	ACTUAL
START:	START:	START:
COMP :	COMP :	COMP : 08/01/80

* _/_/_ _/_/_ _/_/_ *

* _/_/_ _/_/_ _/_/_ *

HQ COMMENT:

* _ _ _ _ _ *

RG COMMENT:

* _ _ _ _ _ *

COOP AGR #	AMENDMENT #	STATUS	STATE %
			0

* _ _ _ _ _ *

REGION: 04
STATE : MS

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

PAGE: 42
RUN DATE: 05/05/87
RUN TIME: 12:52:58

M.2 - EVENT MAINTENANCE FORM

* ACTION: _

SITE: AMERICAN BOSCH ELECTRICAL PRODUCTS
PROGRAM: SITE EVALUATION

EPA ID: MSD004010724 PROGRAM CODE: H01 EVENT TYPE: PA1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S

EVENT NAME: PRELIMINARY ASSESSMENT STATUS:

DESCRIPTION:

* _ _ _ _ _ *

* _ _ _ _ _ *

* _ _ _ _ _ *

* _ _ _ _ _ *

ORIGINAL	CURRENT	ACTUAL
START:	START:	START: 03/01/84
COMP :	COMP :	COMP : 03/01/84

* _/_/_ _/_/_ _/_/_ *

* _/_/_ _/_/_ _/_/_ *

HQ COMMENT:

* _ _ _ _ _ *

RG COMMENT:

* _ _ _ _ _ *

COOP AGR #	AMENDMENT #	STATUS	STATE %
			0

* _ _ _ _ _ *

REGION: 04
STATE : MS

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

PAGE: 43
RUN DATE: 05/05/87
RUN TIME: 12:52:58

M.2 - COMMENT MAINTENANCE FORM

SITE: AMERICAN BOSCH ELECTRICAL PRODUCTS

EPA ID: MSD004010724

COM
NO COMMENT

001 PART A- ON FILE

ACTION

* - _____ *

* _____ *

2. PROJECT MANAGEMENT SUMMARY

Site Name: AMERICAN BOSCH
Site Number: MSD004010724
Owner: UNITED TECHNOLOGIES ELECTRO SYSTEMS INC
Operator: _____
Site Status: ☒ Active ☐ Inactive ☐ Unknown
Priority: ☐ High ☐ Medium ☐ Low ☒ None

3. FINAL DISPOSITION

I. EPS Final Review - Date: 3/14/84
Comments: NOTE DISPOSAL IN COLUMBUS CITY LANDFILL
Site Inspection Required ☐ Yes ☒ No

II. MS BOPC Review - Date: 3-22-84
Comments: OK J. Harbage
Follow-up Action Required ☐ Yes ☐ No

III. Final Disposition:
Review & revise Date: _____
Edited & correct Date: _____
Transmitted Date: _____
File close-out Date: _____
Initiate site inspection Date: _____

4. ADDITIONAL COMMENTS (ONGOING & FINAL)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
EPS FORM 3012-III

INDUSTRIAL NARRATIVE SHEET

1. Site Identification:

Site number: MSD004010729

Site name: American Bosch

Site county: Lowndes

2. Industrial Narrative Summary:

Company Name: United Technologies Electro Systems

Address: P. O. Box 2228 McCreary Rd.
Columbus, MS 39704-2228

Telephone No.: 601-328-4150

Contact: John W. East

Discussion: American Bosch is now named United Technologies Electro Systems. They produce electrical motors, ignition products, and diesel fuel injection nozzles and holders. Their waste consists of water soluble lubricants, grinder sludge, plating lube waste, paint scrapings from electrostatic paint operations and at times, a small amount of lab waste. Prior to regulations, their waste was taken by a local waste handling company and landfilled at the Columbus City Landfill. They are currently operating under interim status and are being regulated. There are no inactive sites on the property; therefore further action is not needed.

3. Disposition:

No further action is needed.

4. Comments:

In the past, American Bosch landfilled their waste in the Columbus City Landfill.

PRELIMINARY ASSESSMENT
EPS FORM 3012-I
EPS ANALYST/REVIEWER CHECKLIST

Site No. NEP004010724
Site Name AMERICAN BOSCH

Instructions: To be used in conjunction with EPA Form 2070-12 (7-81). Attach on inside front site folder. Initial and date for all assessment entries under appropriate part/subpart as completed. initial/date in black for final assessment; in red higher level (additional) assessment is in order. Follow same procedure for review process.

Review Codes: 1-Toxicology Review; 2-Chemical Review; 3-Ecology Review; 4-Chemical Engineer Review; 5-Geotechnical Review; 6-Project Manager Review; 7-Final Review

1. ANALYST/REVIEW STATUS

Form 2070 Part Number	Analyst/ Date	Review Code 1	Review Code 2	Review Code 3	Review Code 4	Review Code 5	Review Code 6	Review Code 7
1.I.-VI.	<i>BR/3-13-84</i>						<i>JMW 3/14</i>	<i>JMW 3/14</i>
2.I.								
2.II.								
2.III.								
2.IV.								
2.V.								
2.VI.								
3.I.								
3.II.A								
3.II.B								
3.II.C								
3.II.D								
3.II.E								
3.II.F								
3.II.G								
3.II.H								
3.II.I								
3.II.J								
3.II.K								
3.II.L								
3.II.M								
3.II.N								
3.II.O								
3.II.P								
3.III.								
3.IV.								
3.V.								

If further assessment/review required, enter 1

TELEPHONE LOG SHEET

1. Site Identification:

Site number: MSD000010724

Site name: AMERICAN BOSCH

2. Interview Data: (Party called)

Name: JOHN W. EAST

Position: INDUSTRIAL ENGINEERING MANAGER

Firm: UNITED TECHNOLOGIES ELECTRO SYSTEMS

Address: MACCARTHY ROAD P.O. BOX 2228

COLUMBUS, MS 39704-2228

Telephone No.: 601-328-4150

3. EPS Analyst Data:

Name: STEVE MORNING

Purpose of call: CONFIRM INFO. ON P.A.

Form 2070-12 (7-81) P.N. PART 1

Date of call: TUESDAY MARCH 13, 1984

4. Interview Narrative Summary: CONFIRMED INFO. ON P.A. THEY HAVE CHANGED
NAME FROM AMERICAN BOSCH TO UNITED TECHNOLOGIES ELECTRO SYSTEMS.
THEY PRODUCE WATER SOLUBLE LUBRICANTS, GRINDER SLUDGE, PLATING LUBE WASTE,
PAINT SCRAPINGS FROM ELECTROSTATIC PAINT OPERATIONS AND AT TIMES A
SMALL AMOUNT OF LAB WASTE. PRIOR TO REGULATIONS THEIR WASTE WAS TAKEN
BY A LOCAL WASTE HANDLING COMPANY AND LANDFILLED. THE COLUMBUS CITY
LANDFILL. THEY HAVE NO OLD STORAGE OR DISPOSAL SITE ON PROPERTY.
GAVE DIRECTIONS TO SIGHT.
CURRENTLY SENDING WASTE TO CHEMICAL
WASTE MANAGEMENT EMELLE, ALA.

5. Disposition/Comments:

SIGHT IS REGULATED. NO FURTHER ACTION NEEDED.

6. Discovery/Comments: Any additional sites used by this company?

Location: COLUMBUS CITY LANDFILL

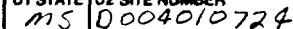
Dates of use: PRIOR TO 1981

Description of waste: SEE ATTACHED FORM FOR CURRENT WASTE CHARACTERISTICS

Comments: _____

RWR
5/22/84

EPA POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT						I. IDENTIFICATION	
						01 STATE MS	02 SITE NUMBER D004010724
II. SITE NAME AND LOCATION							
01 SITE NAME (Legal, common, or descriptive name of site) AMERICAN BOSCH (A BOSH UNITED TECHNOLOGIES ELECTRO SYSTEMS)				02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER MCSPRAY ROAD			
03 CITY COLUMBUS		04 STATE MS	05 ZIP CODE 39701	06 COUNTY LOWNDES	07 COUNTY CODE 44	08 CONG DIST 02	
09 COORDINATES LATITUDE 33 29 21.0		LONGITUDE 088 22 48.0					
10 DIRECTIONS TO SITE (Starting from nearest public road) HWY. 82 EAST. EAST SIDE OF COLUMBUS. SOUTH ON MCSPRAY ROAD. THIS IS THE LAST STOP RIGHT IN CITY LIMITS. THEY HAVE ORANGE AND WHITE WATER TOWER ON PROPERTY. END OF AIRWAY.							
III. RESPONSIBLE PARTIES							
01 OWNER (If known) UNITED TECHNOLOGIES ELECTRO SYSTEMS, INC				02 STREET (Business, mailing, residential) P.O. BOX 2228			
03 CITY COLUMBUS		04 STATE MS	05 ZIP CODE 39701	06 TELEPHONE NUMBER 601 328-4150			
07 OPERATOR (If known and different from owner) NONE				08 STREET (Business, mailing, residential)			
09 CITY		10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER			
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN							
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) A. RCRA 3001 DATE RECEIVED: 11/18/80 MONTH DAY YEAR <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (RCRA 103 c) DATE RECEIVED: _____ MONTH DAY YEAR <input type="checkbox"/> C. NONE							
IV. CHARACTERIZATION OF POTENTIAL HAZARD							
01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE: 5/10/83 MONTH DAY YEAR <input type="checkbox"/> NO				BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1954 BEGINNING YEAR _____ ENDING YEAR <input type="checkbox"/> UNKNOWN					
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED SEE ATTACHED SHEET							
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION ARE BEING REGULATED UNDER INTERIM STATUS. NO FURTHER ACTION NEEDED. CURRENTLY SENDING WASTES TO CHEMICAL WASTE MANAGEMENT SMELL, ALA.							
V. PRIORITY ASSESSMENT							
01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2. Waste Information and Part 3. Description of Hazardous Conditions and Incidents) <input type="checkbox"/> A. HIGH (Inspection required promptly) <input type="checkbox"/> B. MEDIUM (Inspection required) <input type="checkbox"/> C. LOW (Inspect on time available basis) <input checked="" type="checkbox"/> D. NONE (No further action needed, complete current disposition form)							
VI. INFORMATION AVAILABLE FROM JIM HARDAGE MS BOPC 6019645171							
01 CONTACT JOHN W. EAST		02 OF (Agency Organization) UNITED TECHNOLOGIES ELECTRO SYSTEMS			03 TELEPHONE NUMBER 601 328-4150		
04 PERSON RESPONSIBLE FOR ASSESSMENT STEVE HORNUNG		05 AGENCY	06 ORGANIZATION EPS	07 TELEPHONE NUMBER 601 922-8742	08 DATE 3/13/84 MONTH DAY YEAR		



☐ I. HIGHLY VOLATILE
☐ J. EXPLOSIVE
☐ K. REACTIVE
☐ L. INCOMPATIBLE
☐ M. NOT APPLICABLE

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)



**POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT**

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

MS D004010724

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: _____

(Acres)

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED

01 ☐ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: _____

02 ☐ OBSERVED (DATE: _____)

04 NARRATIVE DESCRIPTION

☐ POTENTIAL

☐ ALLEGED



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
MS 0004010724

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (include name(s) of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

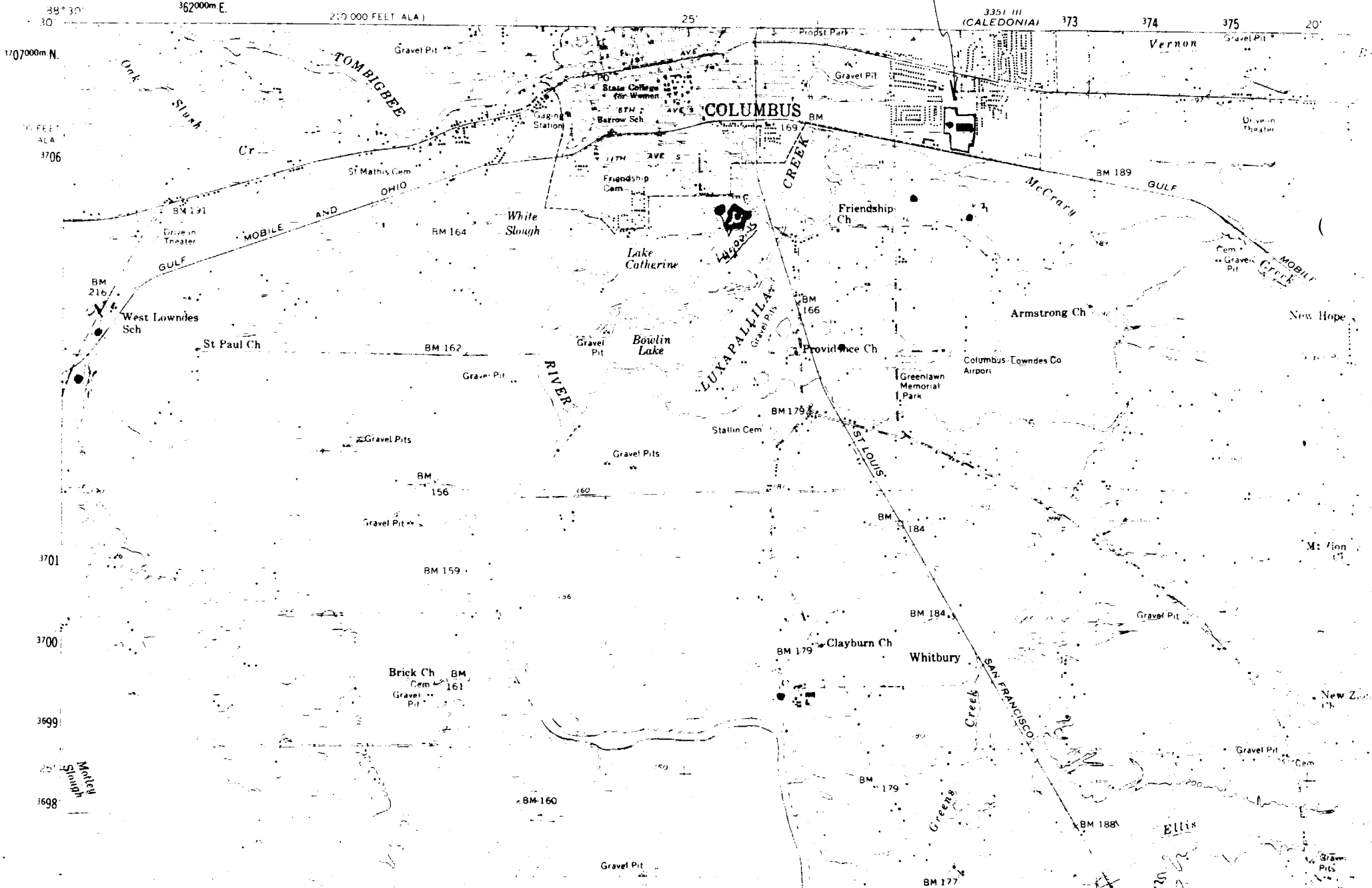
IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

EPA I.D. NUMBER (enter from page 1)												FOR OFFICIAL USE ONLY											
WMSD004010724												W DUP											
IV. DESCRIPTION OF HAZARDOUS WASTES (continued)												D. PROCESSES											
LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	1. PROCESS CODES (enter)								2. PROCESS DESCRIPTION (if a code is not entered in D(1))								
	23	24	25	26			27	28	29	30	31	32	33	34									
1	F	0	0	1	14	T	S	0	1	S	0	2	T	0	1	T	0	4					
2	F	0	0	3	9	T	S	0	1	S	0	2	T	0	1	T	0	4					
3	F	0	0	5	9	T	S	0	1	S	0	2	T	0	1	T	0	4					
4	F	0	0	6	500	P	S	0	1	S	0	2	T	0	1	T	0	4					
5	F	0	0	7	500	P	S	0	1	S	0	2	T	0	1	T	0	4					
6	F	0	0	8	1000	P	S	0	1	S	0	2	T	0	1	T	0	4					
7	F	0	0	9	25	T	S	0	1	S	0	2	T	0	1	T	0	4					
8	F	0	1	0	14	T	S	0	1	S	0	2	T	0	1	T	0	4					
9	F	0	1	7	113	T	S	0	1	S	0	2	T	0	1	T	0	4					
10	F	0	1	8	5	T	S	0	1	S	0	2	T	0	1	T	0	4					
11	P	0	2	9	500	P	S	0	1	S	0	2	T	0	1	T	0	4					
12	P	0	3	0	500	P	S	0	1	S	0	2	T	0	1	T	0	4					
13	P	1	0	6	500	P	S	0	1	S	0	2	T	0	1	T	0	4					
14	P	1	2	1	500	P	S	0	1	S	0	2	T	0	1	T	0	4					
15	D	0	0	6	1	P	S	0	1	S	0	2											
16	D	0	0	8	50	P	S	0	1	S	0	2											
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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED TECHNOLOGIES
ELECTRO SYSTEMS
(AMERICAN 302-11)





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30363

MEMORANDUM

DATE: APR 17 1989

SUBJECT: Environmental Priorities Initiative (EPI) Sites/
The State of Mississippi

TO: File

FROM: Undine Johnson *uj*

The list of EPI sites submitted by the State of Mississippi, in their Superfund PreRemedial Cooperative Agreement Grant Application for the period January 1, 1989, through December 31, 1989, has been changed. The new list of EPI sites consists of the following facilities:

<u>EPA ID. No.</u>	<u>Site Name/Location(City/County)</u>
MSD980839229	Challenger Electric Equipment Company/ Jackson, Hinds County
MSD004010724	United Technologies (American Bosch)/ Columbus, Lowndes County
MSD007022080	Corinth Telecommunications/Corinth, Alcorn County
MSD004000568	Hooker/Occidental Chemical/Columbus, Lowndes County
MSD098590615	Ingalls Shipbuilding, East Bank/Pascagoula, Jackson County
MSD050648757	Ingalls Shipbuilding, West Bank/Pascagoula, Jackson County

cc: Caleb Dana, MSDNR
Mario Baroni, MSDNR
Beverly Foster, Waste Engineering



MEMORANDUM

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

FEB 14 1991

DATE:

SUBJECT:

United Technologies Motor Systems
Columbus, Mississippi
EPA I.D. Number MSD 004 010 724

TO:

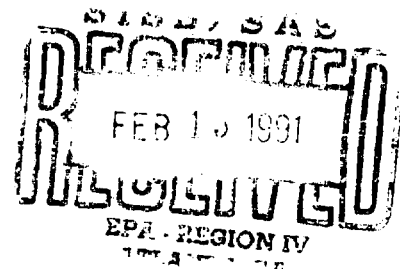
John Dickinson, Chief
Waste Compliance Section

FROM:

Laurie Mitchell
Environmental Engineer

THRU:

Beverly Williams, Chief
AL/MS Unit
Waste Engineering Section



The Mississippi Department of Environmental Quality (MDEQ) performed a RCRA Facility Assessment (RFA) at the referenced facility. This facility is a storage facility undergoing closure, and is not expected to receive a RCRA permit. WES is therefore referring United Technologies to WCS for consideration for possible issuance of a 3008(h) order.

The attached report evaluates solid waste management units at the facility, and is similar to a RCRA Facility Assessment Report. Please send any comments to MDEQ.

Attachment

cc: Brian Farrier